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GEOGRAPHIC EDUCATION AND TEACHING METHOD*

N. V. SCARFE
Dean of Education, University of Manitoba

This article accepts the theme of the forty-first annual conference of the National Council of Geography Teachers that Geographic Education can be and should be a fine instrument for dynamic living. The problem to be discussed, however, is the divergence between what geography ought to do for the citizens of America and what it actually succeeds in doing at present. The trouble it is claimed lies with poor teaching method not with the subject of geography.

The main arguments against the old fashioned school geography were threefold. The subject was too factual, the facts were not related to one another nor were they related to modern life. In addition, the method of teaching was formal drill which relied solely on memory, not on understanding. Geography was a memorized string of facts. It was, therefore, dull and useless.

The main argument against modern school geography is that it is factless. The subject has become a mass of trite platitudes and vague generalities, erroneous generalizations and pseudo scientific pleasantries! The method of teaching is too frequently by textbook assignment and recitation with some new type tests in which memory plays little part, but word or phrase recognition a large part. True-false or multiple choice answers make it unnecessary for clever children to know anything, for simple intelligence will allow them, even if unacquainted with the subject, to obtain half marks. Modern methods also include entertaining film shows, badly conducted coach tours and undirected museum visits. Other class activities on such topics as the value of the Tennessee Valley scheme, or the effects of the St. Lawrence Seaway project often seem to remove children from real and exact knowledge of geographical

* Address presented at the Annual Banquet of the National Council of Geography Teachers at its meeting held in Indianapolis, November 25, 1955.

facts to trivial and sentimental generalities about political and sociological problems well beyond their comprehension. Modern School Geography is, as Isaiah Bowman used to say, "pretended wisdom based on shallow observation."

Much as we must decry the old geography, it was certainly more exact and more exacting than the present type. What was learned was detailed and accurate even if not understood. The present is never detailed and rarely accurate, but it sounds good and is, therefore, doubly deceptive.

No geography worthy of the name can be taught without a vivid and lively acquaintance with detailed facts. The mistake of the past was not the insistence on precise detail, but the divorce of verbal statement from the reality of direct or vicarious experience. Another mistake was not the appeal to memory, but the fact that it appealed to memory only. The ancients seemed not to realize that good memory results from good understanding. Meaningful association of facts which lead to ideas, useful relationships, and desirable attitudes are a fine stimulus to the memory.

The difficulty with modern geography is the unfortunate attempt to skip two essential elements of the learning process and to attempt to teach attitudes by precept and instruction. Wisdom and virtue are not taught by direct instruction. They depend on and result from diligent thinking about facts. Without careful study and thought no one can make sensible deductions, draw good inferences, or arrive at valuable generalizations. Without the stimulus of thought provoking questions, arresting exercises and challenging experiments children cannot develop the ideas and attitudes normally associated with the great geographer. Present methods merely provide children with vague second-hand ideas and lip service virtues.

Modern school geographers seem to have swung from one extreme to another and have thrown out the baby with the bath water. In their efforts to get away from the dull formalism of the past, they have also run away from scholarship, and particularly from the key learning process which is called "thinking." To illustrate the essential and fundamental nature of the thinking process it would be well to draw an analogy between bodily and mental growth. Each are biological growth processes which must be performed by each organism for itself. They are in no sense mechanical building processes which can be done by outsiders.

A mother feeding her child has a clear and definite *purpose* in planning and providing properly balanced meals. She hopes her child will grow strong, healthy and energetic. She will probably also encourage him to take plenty of exercise to use the energy provided by her food, for she knows full well that growth depends on *use* and *application* of strength and energy.

Incidentally, it is evident that altho she does her best to make the food attractive, appetizing and palatable and arranges conditions so that mealtimes are happy and pleasant, *she* decides what constitutes a good balanced diet. Choice of meals by the child is restricted to a limited range of possibilities. More important, she itemizes the food provision into meals, and encourages the child to itemize them further by mastication. Each meal is a unit by itself and there is usually enough variety to stimulate interest and curiosity. Mothers always have in mind adjusting the size and kind of meal to suit the age and physical maturity of the child.

It is not necessary to press the analogy too far, but it is clear that food for the body corresponds with the *plain* facts, *actual* information, *raw* data or *real* experiences provided by a teacher as food for the mind. The aim and objective is to stimulate the growth of wisdom, strength of character, virtue, and general alertness of mind. It is, of course, well known that wisdom, virtue and character are fostered by their exercise, use or application.

Teachers, not somebody else, must decide after careful study what is suitable mental food and supply it. They must itemize it into suitable amounts. They must adjust the amount and kind to suit the age and ability of the child. It is important to say, however, that the clearer the purpose the sharper the criteria by which to choose the right data or mental food.

Thus there are obviously not less than two important functions of a teacher. She must decide on purpose, aims or objectives and she must state these clearly and precisely. Secondly, she must *provide* informative facts or experiences which are most likely to help the child achieve the objectives. Note carefully that the teacher provides the facts. She does not send her children on a fact finding or food gathering expedition. She realizes that such an expedition may be fun but that it is often waste of time, and that children rarely know where to look, nor do they have sufficiently sharp criteria to help them select wisely or efficiently. They can easily collect facts, like squirrels amass nuts, but their relevancy to the main

idea of a lesson may be quite accidental. Note, too, that the teacher provides facts, information and experiences, not ideas or principles.

Let us return to the food and bodily growth analogy. The beefsteak provided for an evening meal is designed to produce energy, strength and growth. The energy used in playing football may be derived from beefsteak, but is very different in form. This miraculous transformation is brought about by a wonderful automatic process called digestion. This important and essential function must be performed by the child himself. No one else can do it. There is no way of speeding it up, but it can be hampered effectively by eating too much too fast, or by eating the wrong sort of food.

However, digestion will usually deal with most types of food, and energy will result, but if digestion does not take place then no energy or growth are forthcoming.

So far as the mind is concerned the corresponding process to digestion is "thinking." If facts are not thought about there is no understanding, no individual wisdom, no strength of character and no real social virtue. Thinking is the essential process which the person must do for himself. No one can do it for him. Many try, only to find they have stuffed the mind with useless uncomprehended facts and ideas. As with undigested food they are soon eliminated from the system.

Thinking is natural and automatic, but the facts and information we provide are by no means the natural mental food of the mind. Children find it very easy and natural to think about their play, or about the things they find outside in nature, but civilized society requires them to think about the artificial items of cultured life and so teachers are necessary to guide and stimulate thought about the artifacts. Teachers are needed also to make the mental food provided particularly tasty, attractive and interesting. Furthermore, they are very necessary in seeing to it that the thoughtful understanding of facts does actually carry over and become wisdom, virtue and strength of character. This is not automatic.

From this it will be seen that a *third* and *the chief* function of the teacher is that of a stimulator of thought. She decides the objective and she saves children time by providing data and information, so that there is more time to stimulate thought. It cannot be stressed too much that the thinking must be done by the children, not the teacher.

Probably the greatest failing of geography texts is that they provide both the facts and also all the thinking about the facts. Teachers too are prone to try to do the thinking for the children. The thinking is, of course, the interesting part of the work, and so should be left to the children. A teacher who merely explains the relationships of facts is not a good teacher. A good teacher is one who asks questions which cause children to look for relationships and think out meanings and conclusions from facts by themselves.

The kind of data, raw materials or experiences which a geography teacher provides are usually photographs, specimens, detailed descriptive stories, statistics, and visits to museums, factories or farms. From these materials, inferences are drawn, arguments developed, implications discovered, and generalizations, principles, concepts, or ideas achieved, and all by the children, but with the help of skilled questioning, subtle suggestions, challenging exercises and clever experiments set by the teacher. Make no mistake, this is an active process using concrete learning material, but maximum activity is of the grey matter above the ears.

All this is practically valueless, however, unless the teacher makes quite sure that the thinking results in ideas demonstrably useful and relevant to civilized life, and in modifying behavior for the good. If the content of geography and the thought involved in sorting out the major concepts does not result in greater wisdom in dealing with social and political problems, and greater virtue in ways of living, then it is not an effective learning situation.

Intellectual effort must affect the emotions, but strong characters do not develop unless there is opportunity to exercise, use or apply the wisdom and virtue acquired. Thus geography must end up by a discussion of modern problems on the one hand and the exercise of self-control on the other, but it cannot begin that way. It begins with simple descriptive geography taught rather inductively. It begins by attending to the intellectual development of individuals, and ends by the achievement of social virtue. It does not begin by discussing social problems, or by emphasis on group learning, or by fact hunting, or heterogeneous herding. Individual intellectual effort cannot and should not be avoided. It has the glory of developing initiative, enthusiasm, and creative enterprise in individuals who are unafraid to be different. It avoids the dull mediocrity of conformity to group pressures and mass hysteria.

Geography should be taught more like good chemistry, under experimental laboratory conditions where children are asked to

observe, record and explain the result of bringing two sets of conditions together, like acid and metal, heat and iron. It should have the same precise aims as science or math. It should arrive at conclusions by the exact and very detailed study of small, typical selected samples. Generality, vague statement and platitude should be avoided like the plague. As in math, children should know exactly what they are going to do, how they are going to do it, and why they are going to do it.

The present emphasis on thinking is because teachers seem to be avoiding it in geography, and, therefore, tend to make our subject valueless for educational purposes. In some cases, too, we are even avoiding the life giving factual details that give reality to the subject. The following examples are drawn from many thousands of errors that high school children make.

1. India hangs on below Asia.
2. The Amazon river wanders all the way across the map from the Atlantic Ocean to the Andes.
3. Chile runs down the back of Bolivia and Argentina like a spine.
4. There are dangerous tribes in South America who think they own the place.

These mistakes are common and they represent extremely grave ignorance which develops when unreal jargon and meaningless map work replace thoughtful attention to and accurate acquaintance with detailed facts. There are, however, some worse errors which are illustrated by the following statements from an authorized Grade X textbook:

1. "The relative location of Europe, no less than the natural location, has favoured its development since the very beginning of history. Its nearness to Asia and Africa has been one of the most important elements in its relative location."
2. "Europe can be likened to a sandwich with mountainous and hilly country above and below and flatlands in between."
3. "Russia is in the process of geopolitical development. . . . What Russia will do with its new-found strength, the future alone can tell."
4. "For immigrants with energy, imagination, capital and good will, Paraquay will doubtless be a land of opportunity in the future."
5. "Their (the Danes) country is distinguished neither in size nor scenery nor fertility of soil, but the cows that live on it help to butter the bread of all Europe."

There are several reasons why children learn unreal verbiage, even when teachers are well qualified; but there seems no good reason why textbooks should perpetrate generalized rubbish.

All these errors indicate that geography is unreal because it is too abstract, too general, and because teachers try in vain to be too scientific too early.

The following suggestions are all attempts to make the subject more live and real, by using devices and methods which will supply the vital detailed descriptive evidence, from which children can derive by themselves their own generalizations and their own abstractions, once they have understood the main purpose of geography.

Detailed, descriptive, vivid evidence is always necessary, not least at the high school level. Sophisticated attitudes are usually attempts to hide indolent ignorance of precise facts, or unscholarly haste to arrive at conclusions and certainties and must be frustrated. There is no way of learning geography by inspired guesswork or sociophysical formulae. Generalities are not to be substituted for careful generalizations or precise conclusions.

No geography worthy of the name is possible without constant reference to a completely understood home region. Excursions to study local phenomena are not activities for elementary schools only. Persistent contact with reality is necessary even for the greatest scientist, let alone for a student in Grade X.

Local study, museum visits or farm trips are not to be undertaken lightly. They are never pursued unless the teacher's lesson program actually needs them. They must be short, and for a specific purpose. No visit to a museum should be longer than half an hour. The children should know the exact purpose for which they are going, and should be furnished with a series of questions relevant to a lesson and for which answers are sought at a museum. No matter how interesting the rest of the museum is, it is irrelevant and must be ignored. A museum visit is a precise study lesson, not a generally entertaining and vaguely determined period. In all outdoor work children must have something precise to look for and to think about. They do not go out merely because it is good to go out. They go out partly in order that they may be in close contact with reality, but mainly to stimulate thought. We all know that visits are interesting, exciting, and vivid. So, too, are photographs and movies, but it must be remembered that the purpose of showing them is not primarily to stimulate interest, but simply to enlist interest in the service of stimulating thought. Thus interest is not an end in itself, it is a means of getting more effective learning done faster than by other means. In other words, it increases the intensity of effort and length of time devoted to diligent thought and learning.

Few students even in high school are able to grasp the geog-

raphy of a large region at first. Over-views and general introductions to large areas are usually waste of time, for they are attempts to generalize first before the students know anything to generalize about. Thus generalization to begin with is always abstract and lifeless. For this reason it is not usually sensible to begin study of any area by reference to a large wall map first. The method of study is to start with small typical sample areas, using plenty of simple descriptive details in order to create an accurate visual image of the reality first. Thus an accurate knowledge of the home region must be matched by studies of similarly small samples selected from the major regions of the world, each of which will illustrate a principle or major concept.

It is impossible to teach geography without presenting vivid descriptive data of the characteristic way of life round the year, together with an accurate idea of the climate and scenery. Travel stories, true literary descriptions and source books must form basic raw material from which geography lessons are developed.

Since words and map symbols are open to misunderstanding it is fundamental to begin lessons with photographs to show the typical and normal conditions in any area to be studied. Still photographs rather than movies are of greater use for they provide finer opportunities for diligent study and questioning. It is not necessary to have enormous quantities of pictures, for it is far better to study carefully a few good typical views than to gaze briefly and vaguely at many. Only when motion is the essence of the idea to be conveyed are movies superior to still photographs. Even then they should usually be silent.

Maps naturally fit into geography teaching for they make for precision and accuracy and help in the ultimate generalizations and in extending knowledge beyond the limits of the small sample area. The kinds of maps that are most useful and illuminating in initial study are, however, those which represent small areas on large sheets of paper, such as the topographic maps on the scale of one inch to one mile, and up to the scale of one inch to 16 miles (1 : 1,000,000). These sheets present areas comprehensible to children and show enough detail for them to be able to look thru the map to the reality it depicts. Most worthwhile geography is learned from such maps and they are a necessary preliminary to the study of wall maps of continents, just as sample studies of smaller regions are a necessary preliminary to a generalized study of a continent or of the world.

Vague platitudes or generalities about the world and its peoples are merely pretended wisdom. They are usually meaningless verbiage masquerading as real knowledge.

Compare the wealth of interesting detail which can be obtained about the size, site and importance of Vancouver from the four one-inch-to-one-mile topographic sheets which cover the area, and that obtainable from the wall map of Canada. Compare the accuracy and the possibility of visualizing what it looks and feels like to live there. It is true that both types of maps are necessary, but the child that misses the one-inch-to-one-mile maps has skipped out the essential and vital basis for understanding the map of Canada. It is like attempting Algebra without doing arithmetic. It is jumping to the abstraction without first trying to reach the concrete reality.

Good teaching of geography is, therefore, nothing more than teaching geography in the same way as one would teach science or mathematics. It is simply a deliberate effort to bring the vitality of life which exists in any area of the world to the child. Vivid, descriptive and accurate visual images must be presented. Any attempt to telescope up life-giving details, in order to get to the systematic jargon of vague generality quickly, is evidence of geographical ignorance and turns the subject into nonsensical textbook verbiage.

The following extract from a true story is an example of the kind of lively detail which brings a sense of reality, and provides the *starting* point of a lesson on the Great Lakes:

"A big steamship, awkwardly long and ungainly, reeling under the ceaseless blows of turbulent waves and sinking by the head from a double burden—an ever-increasing mass of ice on her bows and a cargo that was gradually sliding downhill toward the weighted forward end. A little more of that forward tilt, and she would take one last sliding plunge below the churning waters.

It was a race against time—against winter—and the ship was far from port. Already, along the shore, ice was forming. Here, in the middle of Lake Huron, the waves were still running free; but when they crashed down on the bridge and fo'c's'le head part of the water remained as an everthickening film of ice.

Armed with axes the crew worked like demons, chopping away the encrusted ice. Meanwhile a blinding blizzard swirled and shrieked around them, dazing them physically and mentally as they fought for their lives. Down in the engine-room there was likewise bad trouble; but it was in the hold that real disaster threatened.

The vessel was a grain-ship, and her cargo of loose wheat was not kept in place by partitions or bulkheads, but lay in a vast bulk that was almost liquid in its mobility. The ship being down by the head, her constant tilting and plunging had set the wheat creeping forward like some insidious glacier. The grains slid smoothly over one another, forming hills and valleys which were always moving ahead. Desperately the men tried to shovel the mass back, but it fought against them like some living thing.

That's the picture which comes into my mind when anyone mentions the Great Lakes and the Canadian wheat harvest. I was aboard that ship when those things were happening to her; when she was trying to run the season's last nip-and-tuck cargo before the ice stopped navigation. It was an experience I shan't easily forget, and I am no longshoreman, either. I've been a deepwater sailor in all kinds of craft for many years, but I don't remember anything like that ordeal on Lake Huron."

This extract does not generalize about the size of the Great Lakes, it does not write vague generalities about the severity of the continental winters, it does not utter platitudes about the shortness of the prairie growing season, but all these ideas are there in a simple descriptive story with a wealth of detail. It leaves the children to draw the conclusions, as all good textbooks and teachers should.

The same attitude is true for pictures for they present exact detail of real places and do not generalize. The main problem in their case is to secure what is typical and normal rather than what is spectacular and unusual. The other problem is to ask questions so that the children think about what they see. The best type of geographical picture is that which shows characteristic human activity in its environmental setting.

If we could dogmatize about the method of teaching geography we could say that the following maxims might prove a good guide for teachers:

1. Study effects before causes.
2. Study human activity before physical conditions.
3. Study small areas before large areas.
4. Present descriptive data before asking children to do relational thinking (which is the essence of geography).

The following are arranged in sequential teaching and learning order for the study of any major area:

(a) pictures and specimens of small typical sample areas
(b) word descriptions of the same
(c) maps of the same small areas
(d) maps of the larger area of which the small were typical
(e) generalizations and conclusions about the large area
(f) overview and review by comparative methods.

This, of course, does not apply to a study of the home region which is best done by visits.

Good teaching of geography also means turning the geography room into a kind of laboratory with plenty of travel books, topo-

graphic maps and pictures where children can be actively studious and intelligently curious in thinking thru geographical information, which may help them throw light on the many social and political problems of the world. The dull textbook grind without the use of pictures, real stories or atlases is just as deadening as the ancient recitation of countries' capitals and products. Still more valueless is the vague thoughtless generality which it has been the aim of this article to attack.

PATHWAYS, PERSPECTIVE AND PROGRESS AT ELEMENTARY LEVELS*

EDITH PUTNAM PARKER
The University of Chicago

It is a great pleasure to be able to extend to the National Council of Geography Teachers congratulations on the progress it has been making toward the accomplishment of its purposes. The gist of the relatively informal comments to be here made, under the title Pathways, Perceptive and Progress, is that *each of us has a significant part to play in furthering progress in the teaching of elementary geography; and that, to be able to play our rôle as well as possible, we all need to have increasingly clear teaching perspective.*

If teachers with clear teaching perspective are working at higher than elementary levels, one thing they do is to discover as best they can, and take fully into account in their teaching, what their particular students *actually* have gained from such geographic experiences as have been afforded them earlier. Those teachers can contribute much to progress at elementary levels by revealing what they discover about the *actual* gains their students seem to have made from work at earlier levels, as compared with goals which are stated in elementary curriculum announcements as those sought. Such teachers realize clearly, of course, that *real,* as contrasted with potential, progress at elementary levels spells greater opportunity for accelerating real progress at higher levels. They know, too, that one's real growth during the period of his formal education inevitably makes for his continuing growth after that

* Presented at Indianapolis meeting of the National Council of Geography Teachers, November 25, 1955.

period as he grapples with innumerable problems which confront us in our changing world.

Some Exceedingly Simple "Case Studies"

One's teaching perspective, whether it be clear or somewhat foggy, is always reflected in what he actually does and says. Accordingly, let us think together about what some particular small doings and sayings of a few individual teachers reflect about certain aspects of their teaching perspective. In the interest of making some perspective-sharpening comparisons, two of the teachers quoted are not geography teachers. All are elementary teachers except the first one, who teaches general science in a Junior High School.

Case I. At the close of a class period, this general-science teacher said to his class: "Tomorrow we're going to begin to learn some astronomy by studying the heavens. In our study, we will need to mention two specific things repeatedly. I happen to know that you've all heard the names of those things. You can't touch either of them, but you have seen them many times, and they will be in your surroundings wherever you go. We will use these names in telling, for instance, where in the heavens we see certain stars. The names each have more than five letters in them. Tomorrow, first thing, you can tell us what you think those two things are."

Now anyone who knows "human nature" knows that it is difficult, for most people at least, to refrain from doing a little thinking about what he has observed, and, if necessary, a little talking with others, or reading, when thus challenged. As the teacher fully expected, the terms "horizon" and "zenith" were forthcoming from the class the next day, and were meaningful to the class members from the outset of their work. Moreover, the pupils showed signs of feeling immediately that they were going to like studying the heavens, for everyone gets much inner satisfaction from having thought out something for himself correctly.

That teacher had not only certain elements of clear general teaching perspective, but also gave evidence of having, in considerable degree, clear science-teaching perspective. His few words strongly suggest that he had sharply in mind the major ideas which he planned to *lead* children to acquire, thru observation and thought about what they discovered, in their study of elementary astronomy. Accomplishing the very specific purpose which he obviously designed his initial challenge to serve would contribute

not only to a child's growth in ability to do sound reasoning, but also would put the child a step forward toward the gaining of those major ideas. All of us can keep sharpening our geography-teaching perspective by askng ourselves time after time, "Exactly how does attaining the *immediate purpose of this specific experience* I am providing for members of my class contribute to the fulfillment of the major purposes of my teaching?"

Case II. In a recent newspaper article, the impromptu, immediate comments of an elementary science teacher, when an inquiring newspaper reporter unexpectedly asked her about the importance of elementary science, were quoted as follows: "Science meets children's needs. It gives them a chance to think things thru for themselves, to manipulate, to find out. It is inquiring. It makes children feel secure in their environment. It gives them things to think about and things to do. And it gives them answers. Trying to wire an electric bell, for instance. If it works, they know they have the answer. That makes teaching fun." These "on-the-spur-of-the-moment" comments reflect clear science-teaching perspective, which always consists in part of general teaching perspective. This teacher instantly thought of the kinds of inner-satisfaction-giving experiences which she as a teacher could readily provide for children, by reason of her insight into science and into the nature of science materials with which children can work in discovering for themselves. She would not label the strenuous work involved in teaching elementary science "fun" unless the growth of her children thru the science-learning experiences she was providing for them had been obvious to her.

Case III. The third case was selected because of the recently coined educational terms used by the teacher quoted. In the words of Isaiah Bowman, "educational methods need always to be freshened by the springs . . . that flow out of attempts to get nearer realities." Some of the attempts to get nearer realities in recent studies of human development, for instance, have resulted in findings the expression of which seemed to call for some new terms. Other new terms which have been introduced are merely new dresses, so to speak, for ideas that have been for a very long time in the main stream of educational thought. In such cases, it doubtless was felt that, as many of us know, a new dress ofttimes freshens inner spirit as well as outer appearance. Both types of new terms also have appeared in geography.

In a newspaper article, the report of this Case III teacher to the

parents of one of her boys about their son's progress was quoted as follows: "He's adjusting to his peer group and achieving to expectancy in the skill subjects. But I'm afraid his progress in the content subjects is blocked by his reluctance to undertake his developmental tasks." About this report, the eminent educator Herold C. Hunt is said to have asked this simple, straightforward and significant question. "Can parents understand their children's teachers?" As his question implies, the couching of the report in those terms, all of which are of the "new dress" kind, defeats the basic purpose of teacher-parent reporting. Apparently this teacher was so enamored of a language dress suitable only for certain formal occasions that she was using it all day long. She was letting language designed to help emphasize certain ideas inherent in clear teaching perspective befog her perspective. To one with clear teaching perspective, moreover, it would be inconceivable that a lad of the caliber she indicates this one is would react adversely to *appropriate* learning experiences in geography, history, social studies, and the like. I strongly suspect that the activities which this teacher would ask one to undertake in studying geography would be of kinds I'd have been as loath to undertake as she says he is. As we all know, *nothing is more important in effecting real progress in our teaching of geography than is the provision of the most productive kinds of geographic learning experiences for our children.*

A significant "aside." Perhaps, before considering Case IV, we should call to mind some facts familiar to us which stress the unique opportunity which the study of geography affords for providing some very distinctive types of exceedingly valuable learning experiences and activities. Just as astronomy gradually grew out of thought about questions prompted by observation of the heavens, geography has grown gradually out of thought prompted by observation of people, things they have added to the surface of the earth, and things we call natural features on that surface. All these things can be seen, in different meaningful combinations, in actual landscapes and in pictures of landscapes in any given part of the surface of the earth.

In geography, the face of the earth, and in astronomy, the heavens correspond to the laboratory in those sciences which have grown out of both the observation and manipulation of concrete objects—physics and chemistry, for example. Just as many of the

most effective learning experiences in manipulatory-observational sciences involve laboratory work, many of the most effective geography-learning experiences involve actual field work or indoor "field work" with pictures and maps in which one learns *from his own observation and thought about what he observes.* Highly significant is the fact that natural science and geography are the only two content subjects in the elementary school curriculum which, by reason of their nature, *can* provide *in rich measure* opportunity for such *first-hand* learning experiences. One with clear geography-teaching perspective knows that withholding such experiences from elementary children is akin to withholding from them one kind of very valuable food which contributes to their bodily growth. He also knows that conning given facts from a second-hand account, and then being shown landscapes to demonstrate that those facts are "as advertised," is not synonymous with having first-hand experiences in discovering those facts thru one's own observation. Only as more and more teachers of geography at all levels provide first-hand discovery experiences abundantly for young learners, can we hope to make as much real progress in teaching elementary geography as is possible. With such facts freshly recalled, we return to the case studies.

Case IV. A fourth-grade teacher's class was just ready after having studied several other countries to begin to "explore," as she called it, a country the name of which she wrote on the board and pronounced. She asked if any one in the class or any of their parents or relatives had been in that country, or if they'd heard anything about it on radio or television or in conversation they'd overheard. One with clear geography-teaching perspective realizes at once two specific purposes such questions have. They call attention to *reality,* to the fact that the country named is a real part of the earth's surface which people go to see and in which people are doing things that may be talked about in current news programs, etc. Secondly, they bring to the fore each child's background of informal experience. The answers children make give a teacher insight into what ideas children already have about the country which may need to be corrected as study proceeds, or which may contribute something worthy of consideration as the work progresses. Of course, a teacher with clear geography-teaching perspective would not let any statement of current events noted become a "tail which wags the dog" in the exploration. In this case,

no informal experiences were reported by the children, and the teacher proceeded with: "Today we've only three pictures in our text to use in our first exploring, but probably you can discover a few things from them for yourself." Very shortly, one child said, "The homes look a lot like those we saw in X. I wonder where the wood in them comes from? The pictures don't show any forests." Another said, "People there have some pasture land and some sheep," and a third child added "Maybe that's a garden or part of a field with a crop in it that shows in the corner of the picture. I can't tell what is growing there. I wonder what the crop is." Other comments were "The house makes me think that maybe the people who live in it can't make a very good living from their land." "And the road isn't paved." "There is only one tree in any of the pictures and that makes me think that perhaps there isn't much rain." "And we've found people raising sheep in some other places where there was little rain." Then one pupil countered with, "But we've seen them, too, where there was plenty of rain. We'll have to find out about that," obviously meaning the rainfall. A boy who hadn't before spoken contributed to the very informal reporting, "I've been looking at the town. One building in it looks like a church. The others, I think, are mostly homes or shops. Nothing looks like a factory." Another said "Perhaps it is a little market town. There is a railroad," and so on.

It is clear at once that these children earlier had been afforded considerable experience in first-hand observation of landscapes and had learned to see real meaning in some of the landscape features observed. They saw in those they were observing, for instance, signs of what at least some people were doing in the exceedingly small parts of the earth's surface at which they were looking, and signs of some of the problems those people might have. They were making some simple inferences in the light of their own first-hand observation and of what they had learned from their earlier experiences in first-hand exploring.

The inferences they made show that they were learning to think about connections or interrelations between facts they gleaned from direct observation. But it is clear that they were learning to avoid such false inferences as that rainfall *explains* why people raise sheep in certain places. Rainfall is, of course, one of a host of things to be taken into account in discovering problems people face in any given homeland. But the variable of human choice enters

into what man does wherever he lives. It is of great significance that the children realized the need of checking their inferences.

They had in mind, as a result of their meagre bit of observation in this instance, at least a few simple questions *of their own* which obviously would make their use of other materials purposeful to them. They wasted no time in haggling about their inferences. Instead they turned with their own little queries to maps and reading matter in their text, and were seemingly eager to do some discovering from those sources. When the teacher asked if they wished her to write those few questions on the board before they went on, they said they had them in mind. As the period ended, one child said, "I found I was right about three things." The teacher asked if there had been some surprises, too, and when several said "Yes," she said, "We'll talk about them tomorrow."

Of course, much more spectacular cases of affording first-hand observational experiences could have been selected, cases in which, for instance, an "indoor reconnaissance-survey" trip involving use of a considerable number of carefully selected pictures, or an actual field trip, had been organized. This case was chosen because it reminds us that, altho children need a great variety of experiences in first-hand observation and a host of experiences in learning to make *concrete meaningful discoveries* from maps, it is possible to give *some* valuable first-hand learning experiences even in the use of a few text pictures. In contrast with the insight which the children under this teacher's guidance seemed to be gaining into the meaning and significance, in the lives of human beings everywhere, of things one can see, or see going on, in any place on the earth's surface they observe, think of the hundreds of American citizens who, as they tour other lands, miss utterly the meaning of most of what they look at.

The next case reminds us that one of the best proofs of the actual growth which those in our classes make, thru first-hand learning experiences and thought based on what they discover, is what those young people notice *later,* and give thought to, when entirely "on their own."

Case V. A fifth grade teacher tells of a very excited group of her children who insisted on her coming with them to see something very interesting which they had discovered on their way to school. It proved to be a row of little fan-shaped mud deposits on the sidewalk at the foot of a bare slope from the level of a raised lawn to

the walk. There were tiny steep valleys in the slope but they were dry. "Who'd have thought we'd see baby deltas here?", they said and added, "We wish they'd keep on growing." "There aren't any streams," the teacher challenged. They'd figured that out already. It had stopped raining. One of them said, "Maybe some time we can really travel to a place where we can see a big delta on which people are living."

In commenting on this trivial incident, the teacher said, "Obviously, they were even more excited than over discoveries they'd made for which I had specifically paved the way, because they'd made their discovery unexpectedly *all by themselves* in a peculiar place. Nothing about deltas had been mentioned in class for weeks and the only experience they'd had with them had been with pictures and maps of places in a distant homeland." However, without those experiences they'd have just seen mud spots if they had noticed them at all and would have missed all the fun of this little bit of first-hand discovery which was all their own. Thru first-hand geographic learning experiences children keep on learning for themselves to see "thru new eyes" so to speak, and to take observable realities into account in thinking about what is going on in our world. A child quickly senses the difference between conning geography and studying it in a way which gives him much opportunity to see and think for himself and to have his thinking challenged. The son of a neighbor of mine who had a new teacher was asked by his father why he no longer was enthusiastic about geography. He said "We used to explore and fight it out to know. Now we just learn and point to maps."

Accelerating Real Progress in the Teaching of Geography at Elementary Levels

Without touching at all upon numerous other facets of geography teaching perspective, we turn next to consideration of: (1) a major obstacle we face in our efforts to accelerate real progress in the teaching of elementary geography; and (2) ways in which we can help to overcome that obstacle. In stressing in preceding comments the importance of first-hand learning experiences, there is, of course, no implication that young people under our guidance should be led to rediscover for themselves all the geographic facts they learn, and infer for themselves all the functioning geographic ideas they gain. But only as they have appropriate first-

hand experiences in reasonable number can they really assimilate (instead of merely conning) facts, findings, and valid generalizations which are presented to them in texts, lectures, films, maps, and other teaching materials. Unfortunately perhaps, there is no substitute for the personal element in teaching, and a teacher who has never herself had some first-hand learning experiences in geography is at a loss in trying to provide them for others.

It seems to me obvious that the greatest single obstacle to be faced in trying to effect real progress in teaching geography at elementary levels is the fact that such experiences have not been had by a great many teachers who are teaching elementary geography. Nor have such experiences ever entered into the education of a large percentage of our supervisors, educators, curriculum makers, and other adults who as parents and/or public minded citizens are vitally interested in improving the education of young people.

Seeing to it that in our geography classes, *at whatever level we teach,* appropriate first-hand geography learning experiences are being provided in adequate measure for young people under our guidance contributes in two ways, of course, to real progress in teaching geography at elementary levels. Some of those young people will become elementary teachers of geography. Those who do not go into the teaching profession will recognize the great value of first-hand geographic learning experiences for any citizen. In many cases, they will bring pressure to bear on elementary schools in their communities to provide them. However, such a leavening process is slow.

There also is a growing demand on the part of the general public (which has become increasingly aware of what is being termed "American geographical illiteracy") for what you and I call "what-is-where" geography, the only kind most of the public knows about. But geography of a kind which, for instance, a football coach teaches, with the aid of factual material he looks for in texts, is in most cases a far cry from geography of a kind that provides for children the types of geographic experiences they need.

Little is to be gained by mere argument with planners of teacher-training and school curricula and with other school folk who, however capable they are in many ways, do not understand the value we know first-hand geographic learning experiences have, because of their own unfamiliarity with them. But are there not various

constructive ways in which we, as individuals, and our local and state geography councils, can speed them toward understanding the value of such experiences?

Can we who are elementary teachers with clear geography-teaching perspective arrange now and then for "open house," invited-guest gatherings, at which guests can see our children being given first-hand geographic learning experiences? Guests might be parents. They might be fellow teachers who have not been privileged to have such experiences.

Perhaps Junior Geography Clubs, which have been organized in various localities, can be used in acquainting others with the kind of geography work which spells real progress in our geography teaching. Think of what public demonstration of the work of 4-H clubs has done for the cause they are advancing.

Many geographic field trips have been organized by State Councils for their members. Can occasional field trips be designed by state or local geography councils for the specific purpose of letting invited teachers who have lacked first-hand geographic learning experiences participate?

It is possible, as relatively recent articles by Wolfgang Langewiesche in *Harper's Magazine* and *Reader's Digest* evidence, to write of one's own first-hand experiences in direct observations of landscapes and one's thought about what he sees in such a way that the reader has the feeling of actually observing and thinking with him. He sees in the landscape stories of what man has "written on the surface of the earth." Can some of us write articles which appeal to the general public as much as his have, and which help acquaint the reader with what is involved in first-hand geographic learning experiences? Can we not, in any event, take pains to recommend informally to various general readers whom we know well, articles of this type which we discover?

Non-commercial educational broadcasting is becoming more and more effective. The new Chicago WTTW television station is giving some excellent demonstrations of elementary teaching in foreign language, for one thing. Could individuals, or a National Council committee, work on the problem of devising some broadcasts which would promote understanding of the kind of geography teaching which will serve to accelerate our progress?

You doubtless will think of other and better suggestions than these sketchy ones for overcoming what I believe to be our major

obstacle. I have great faith that potential progress in the teaching of elementary geography will be translated into real progress at an accelerating pace. Let us remember that the great Pacific Coast Highway was, for a very long time, only a dream in the minds of a few men. On our teaching-of-elementary-geography pathway, a great deal of *actual construction* already has taken place. I feel sure that, as we workers labor together to remove obstructions still ahead, construction work will go forward ever more rapidly till what we dream of will become, as the Pacific Highway now is, a reality.

THE MAP COMES ALIVE

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Are your map studies dull? Are your pupils bored with the sight of the geography book? Do the girls and boys tire of working on paper desk maps?

Perhaps this will solve your problem: try flannel maps. Flannelgraph users have been delighted by the number of uses to which they can put the flannelboard. The principle behind flannelgraph is that flannel (felt or any napped material) will stick to flannel. Thus your figures may be moved at will and can be transferred from place to place as you study the different sections of the state or they may be used with the study of other states as needed.

An opaque projector may be used for outlining your map on a light color flannel. A small map cut on the outline and held in front of a lamp will cast a shadow outline on your flannel. Or you may draw a freehand outline. Place your map on a flannelboard, tack it to an easel, bulletin board or from the top of the blackboard to the chalk tray. As long as it is slightly tilted it will be satisfactory.

Cut mountains from brown (both sides napped) flannel, main rivers, lakes and seas from blue flannel and deserts from tan flannel. Your children may prepare the mountains, water and the deserts. If you lack the proper color flannel, you may color white flannel with oil crayons preferably, wax crayon or chalk.

What else do you want your map to show? Indian tribes, perhaps? Make name cards in the shape of tepees from paper and back with flannel.

NEW JERSEY
MINSI
UNAMI
Atlantic Ocean
UNALACHTIGO
Delaware Bay
CAPE MAY

Fig. 1.

Chalk will take to flannel. It does wear off but you might use it to show the dots for principal cities. Name cards may be made and placed in the proper places. Have the children locate these cities and place the names as they study them.

Rainfall or growing season may be shown by shades of gray flannel and shades of green flannel. Lighter shade representing less rainfall or least number of months as on standard maps.

Major transportation routes (or the routes travelled by an army such as Washington's) may be shown with colored cord or wool. An airplane, train, truck or bus may be put on the cord and slid to its destination easily. Boats may be placed on the rivers and lakes, to go only as far as the head of navigation.

Do you want a product map? Have the children draw, and back with flannel, the crops and manufactured products of the area. Have them place the products on the map in the proper region. Forests may be shown with dark green flannel covering the forested section.

For an historical map you may have important buildings or events drawn and placed on your map. Symbols might be used. Crossed swords may represent a battle.

Do not put too much on your map at a time. Place only that which is needed to teach a specific lesson. However, for a concluding review you might wish to draw the relationships of all these points, in which case you may place on as much as is needed to have a basic understanding of group relations. In this way rainfall and growing season can be shown with their effect on the particular crops of the area. Transportation can be related to the development of the cities, their industries and crops. Mountains and deserts effect both the living conditions of the people and the industrial development. The rivers mean more than limited transportation; they are a source of hydroelectricity, they create needs for soil control, they furnish water for irrigation, they frequently aid fishing and canning industries, as well as being, at flood times, a destructive force.

As the children study they rebuild the state or country, watching its development from a wilderness with a few Indian trails to a thickly populated area enmeshed in a great network of transportation routes as it is now. Here they can see connected causes for its growth as a direct result of its physical factors.

For the study of a particular state (your own perhaps) the

child may have a small flannelboard and map for his own desk. He will, of course, make his own parts. Or you may want them to fix it on paper for a notebook, permanent wall map, chart, posters, etc., by sketching a particular scene from the larger map.

As you work with the flannelgraph map, you will find many more uses to fit the needs of your class.

POPULATION TRENDS OF MISSOURI

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The State of Missouri experienced a long period of rapid population growth. From 1810 when the population was a mere 19,873 until 1890 when the population was 2,679,185 the percentage of growth averaged 94.5 for each decade. However, the largest gains were made during the early decades of this period. From 1890 to 1950, when the total population was 3,954,653, the percentage of growth averaged 9.5 for each decade.[1] These figures show that Missouri has always experienced an increase in population from period to period, but that the percentage of increase dropped substantially after 1840 (Fig. 1). A factor other than a lower percentage of natural increase (births over deaths) has been migration in and out of state. Since there are more people emigrating than there are immigrating, Missouri is a population exporting state.[2]

However, Missouri seems to show more striking population trends by a comparison of counties since 1890 than by a comparison of growth percentage over an extended period of time. Some counties show a 50 per cent decrease or more while others show a 100 increase or larger. Scuyler County in northeast Missouri is an example of a 50 per cent decrease while most counties in the Southeast Lowlands, and some urban areas, show a 100 per cent increase or larger (Fig. 2).

It appears that those counties losing population have done so largely because of the rural to urban movement and lower birth rates. Generally speaking those counties that have gained are urban

[1] Total population figures are extracted from the "Number of Inhabitants, Missouri," *United States Census of Population*, 1950, p. 25-8.

[2] Noel P. Gist and others, ed., *Missouri: Its Resources, People, and Institutions*. Curators of the University of Missouri, Columbia, 1950, pp. 221-22.

or urbanizing counties and those rural counties that have not greatly changed their methods of farming.

Perhaps the best basis of explanation for the phenomena of these changes in population lies in a division of the state into three dominately rural regions based largely on topography and an urban division. These rural regions are the Glaciated and Non-glaciated Plains of northern and western Missouri, the Ozark region, and the Southeastern Lowlands. Advantages of this basis

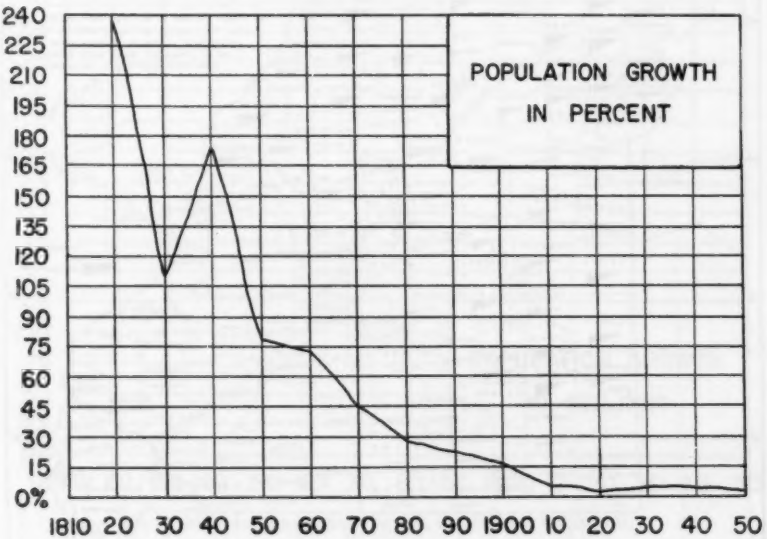

Fig. 1. Missouri Population Growth in Percent (1810-1950).

for division are simplicity and separation of the main areas of population gain and loss.

The Glaciated and Non-glaciated Plains region includes some of the richest land and most prosperous farms to be found in the state. Topographic, climatic, soil, and other conditions have been such that it has been profitable to mechanize most of the farms. A consequence of mechanization has been to reduce the number of farms by increasing the acreage of the individual farms. Mechanization has had perhaps the dominant role in the larger size and smaller number of these farms because with machinery a given amount of work can be done in less man hours. Since less man hours

are required for the same amount of work, it follows that as many farmers will not be needed to till the same number of acres. The need for fewer farmers and the concomitant growth of economic opportunity in urban areas has resulted in emigration from this region and is an important cause of a decreasing population. Other

POPULATION TRENDS
BY COUNTIES, 1890-1950
The graphs are plotted on a logarithmic vertical scale. The slope of each curve indicates the proportional increase or decrease in number of inhabitants during each decade since 1890 according to the scale.
From map by Missouri Division of Resources and Development
Data from U. S. Census

Fig. 2. (From: Collier, James E, *Agriculture Atlas of Missouri*. Missouri Agricultural Experiment Station, Bulletin 645, 1955.

causes are a low birth rate, small families, and a high proportion of older people.[2]

In contrast to the glaciated and non-glaciated plains region of Missouri, the Ozark region has in general shown a static or slightly increasing population. As a whole the region has many small farms located on steep slopes. Most of them are badly eroded. Mechanization has not had much effect on farm exploitation in this region.

[2] Ibid.

With many of the fields located on steeply sloping land, with their small size, with the relative poorness of the land, and with the general backwardness of the region, it is not likely that much mechanization will take place in the near future. Under the present methods of exploitation the area has more people than it can adequately support, so the region tends to be an exporter of population. Dur-

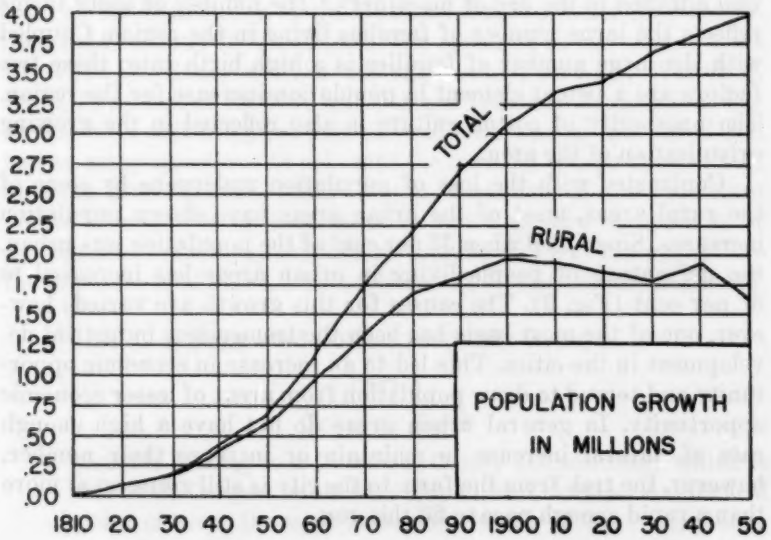

Fig. 3. Missouri Population Growth in Millions (1810-1950).

ing the prosperous years of the 1920s the graphs show a downswing in total population. Due to a lack of jobs during the depression many people returned to the farm and the graphs show a corresponding upswing in population. With the return of prosperity in the 1940s the population charts again show a loss (Fig. 2). It appears that a part of this loss is attributable to military service requirements. This area can export population thusly because of a high birth rate and little economic opportunity. The exception to these generalizations seems to be in the Ozark border region. The best explanation for this exception appears to be that it is in the transition zone between the glaciated and non-glaciated plains and the Ozarks proper.

The remaining dominately rural region, the Southeastern Lowlands, is noted for the production of cotton. The area is a rich agricultural district, but the prosperity usually associated with a rich agricultural region is partially counter-balanced by sharecropping, cheap day labor, farm tenancy, and other such conditions which generally accompany cotton culture. Along with these conditions, farms are generally small, because cotton has not yet proved itself well adapted to the use of machinery.[4] The number of small farms reflects the large number of families living in the region. Coupled with the large number of families is a high birth rate; these two factors are a potent element in population increase for the region. The prosperity of cotton culture is also reflected in the growing urbanization of the area.

Contrasted with the loss of population undergone by some of the rural areas, most of the urban areas have shown population increases. Since 1890 when 32 per cent of the population was urban, the percentage of people living in urban areas has increased to 57 per cent (Fig. 3). The causes for this growth are varied; however, one of the most basic has been the tremendous industrial development in the cities. This led to an increase in economic opportunity and served to draw population from areas of lesser economic opportunity. In general urban areas do not have a high enough rate of natural increase to maintain or increase their number, however, the trek from the farm to the city is still going on at more than a rapid enough pace to fill this gap.

Summary

The primary trends in Missouri seem to be a shift from the rural areas to the urban areas and out of state, along with a lessening rate of increase in the population (Fig. 1). The migration to urban areas seems to hinge on the greater chances for a means of livelihood and other advantages to be found in the city. Concomitant with the urbanization movement is the emigration out of state. It appears that the out of state movement is also due to greater economic opportunity to be found elsewhere. The lessening rate of growth is a trend that is apparent over the whole country and is based, according to some authorities, on the reasoning that as a country matures its population will tend to level off.

[4] Edward Rutledge, *Missouri: Land Use Patterns.* Unpublished M. A. Thesis, University of Missouri, 1941, p. 86.

THE IMPORTANCE OF GRASS

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The following is a suggested outline of a study for elementary schools and high schools which the writer presented in mimeographed copies to the audience of a section of which he was chairman, at the Convention of the National Science Teachers Association, held recently in Cincinnati. The speakers at the section were Dr. Fred V. Grau, well known agronomist, and Dr. Walter S. Lapp, President of the National Science Teachers Association. The section was well attended and the audience was so interested and had so many questions to ask, that the meeting was prolonged half an hour after the scheduled time to close. One of the important points brought out in the discussion was that thru the medium of a program of teaching, children and adults will learn to appreciate the importance of grass, a valuable commodity commonly neglected.

A Suggested Outline for Study Groups

Part I

Grass as Food

1. Grasses belong to a botanical family (Gramineae) which is one of the largest, most widespread, and, from an economical point of view, the most important family of flowering plants. Growing all about us, it is taken for granted, and its great value not generally recognized.
2. Pasture land has always been an important part of the economy of the farm. Rotation grazing.
3. Increase in population makes the best use of land imperative. The growth of towns and cities increases the need for the products of farms.
4. Varieties of grasses: timothy, blue-grass, red top, fescue, etc.
5. Hay and hay-making. (a) mowing (b) drying or making hay (c) carrying or storage in stacks or sheds.
6. Social events in connection with hay-making. Barn-raising.
7. Use of fertilizers. Nitrogen, phosphorus, potash.
8. Importance of grass in the United States. Hay is one of the major field crops in the U.S.A. On the larger part of Ohio's

rotated crop land, for example, grass is used in the rotation.

9. Grass is the natural cover of the soil in many parts of the world. Nomadism in Arabia and in other countries. Importance of grass to camels, horses, cattle, sheep and goats.

Part II

Grass and the Conservation of Natural Resources

1. The conservation of our natural resources, of which soil is one of the more important, adds to our own welfare and means much to all the generations that come after us. Upon the upper ten inches of soil thruout the world depends the very existence of human life. Nature took hundreds of thousands of years to prepare soil for our use and some people destroy it in a generation.
2. Erosion of our land is going on everywhere.
   (a) Water erosion. Rain and floods carry away the best soil from millions of acres.
   (b) Wind erosion. Wherever strong winds blow, soil is being blown away. The "dust bowl." Reasons for erosion: light rainfall, over-grazing, and plowing areas which should have been left in grass.
3. Turf grass is conservation. The soil is saved. The grass can be used for pasture or hay.
4. Implications of research. Specialists are experimenting with various kinds of grasses to evolve the best varieties to grow under trees, on lawns, in school grounds, on football and baseball fields.

Part III

Helps to More Realistic Science Teaching

1. Have students bring leaves, stalks, flowers and seeds of various grasses growing about or near the school.
2. Project pictures on the screen of (a) various kinds of grass (b) making hay (c) baling hay (d) nomads (e) soil erosion and how grass prevents soil erosion, etc.
3. Have students test their powers of observation near the school by identifying areas where soil is eroded. Have them talk to farmers about the problem.
4. Point out on maps of Natural Vegetation, the parts of U.S.A. and of the world where there are great extents of grass land.

5. Initiate a project of planting grass on parts of the school grounds where the grass has been destroyed or the ground eroded.
6. References. "Encyclopaedia Britannica" and various textbooks. The "Grass Seed Manual" can be used to fill in parts of this outline. It has pictures of grasses and weeds accompanied by a popular discussion, scientifically correct. (Published by J. Charles McCullough, P.O. Box 146, Cincinnati 1, Ohio. Costs one dollar.)

A DYNAMIC APPROACH TO TEACHING WORLD POLITICAL GEOGRAPHY

HERBERT VENT AND DONALD W. COX
Air University
Maxwell A.F.B., Alabama

Those teachers with a less than expert background in World Political Geography may encounter some difficulties in teaching the course, unless provided with some instructional guidance specifically aimed at facilitating instruction in this subject area. Even with a better than average text, instruction in world political geography usually suffers because the teacher does not make adequate use of visual aids, use proper methodology or cover the subject matter properly. This paper attempts to examine each of those three vital aspects of world political geography and offer some guidelines which should be helpful to most teachers.

The useful guidelines which follow will come under three categories; namely, (I) visual techniques, (II) teaching methods, and (III) subject matter.

I. VISUAL TECHNIQUES—TO ENHANCE THE TEACHING OF WORLD POLITICAL GEOGRAPHY

Each field of knowledge has certain tools and aids on which it must rely to obtain its classroom objectives. Those used by geographers and political scientists include globes, maps, relief models, and organizational charts among others. The globe and certain map projections are of most concern to you for successfully teaching Air Age concepts. These devices are most important because of their size and functional uses.

Globe. First, let us analyze the value of the globe. It is man's closest approximation to the earth itself. The globe portrays the true shape of the earth, the continents, and the oceans. Use it especially in your introductory work, and wherever else it is feasible, for it enables you and the students to make accurate comparisons of earth phenomena. You will be better prepared to subsequently use the various map projections more intelligently. The globe is literally the "earth brought to the classroom," so by all means bring it to the classroom.

Maps. Because of the ease of manipulating it, the map is the most important geographical tool, even more important than the globe. There are numerous types of maps or projections, every one of which you must realize is distorted, for there is no completely accurate way for portraying a spherical surface on a flat plane. However, since there are different kinds of distortion, area and shape, as well as peripheral and high latitude distortion—varying from projection to projection—it behooves you to choose maps that give the most accurate picture of areas of concern. For your purposes the polar stereographic, Lambert conic conformal, Mercator for the equatorial regions, and the equal area types of maps for distributions of economic goods should be employed. Emphasize that we live in an age where there is concern about 360° of map orientation as exemplified by our air bases encircling the U.S.S.R., and not just the old east-west Mercator orientation. In fact, if any direction deserves extra emphasis, it is North. It is for that reason that the Air Force so strongly urges its instructors to always have before the class a pole-centered global chart of the world. The instructor will facilitate his instruction by map drill on this global chart until locations no longer appear strange to the east-west oriented student. This is an important step toward achieving a global-thinking reference.

Not only should you use the relatively small scale maps for learning about the earth in general, you should also use large scale maps to learn very specific facts and interpretations about small areas. Outline maps of strategic areas and of countries or continents are invaluable aids for learning more about geographic and even political patterns. Completing outline maps forces students to use maps and atlases, and it is only by using maps that map facts and interpretations are acquired.

Among the most useful maps for geographic evaluation are

the population map, the rainfall map, the contour or relief map, the climate map, and the natural vegetation map. All of these types may be found in *Goodes World Atlas,* or any other standard atlas. Their values may be illustrated in brief as follows:

Population Maps. High population density in general is a good indication of a rich and productive environment; for example, the Rhineland. Conversely, low densities of population are characteristic of the austere environments, typified by such areas as West Pakistan, Saudi Arabia, and Alaska.

Rainfall Maps. There is a high correlation between annual rainfall and productive capacity and population density. Japan, Western Europe, and the Northeastern United States have heavy annual precipitation, and all of these areas are highly productive and heavily populated and immensely important geopolitically, as evidenced by recent power struggles involving these areas. This correlation does not necessarily hold for the tropical regions, for there is a point of diminishing returns insofar as precipitation is concerned, especially when accompanied by other undesirable factors such as monotonous climate and high relative humidity.

Relief Maps. The relief map, too, gives some good clues as to land utilization. In the middle latitudes, it is almost axiomatic that the good, desirable lands will be plains or areas of low elevation. These are the regions that will have the deepest accumulations of fertile soil, the longest growing season, and best transportation systems, other things such as the cultural milieu being equal. The intensively utilized lands of the middle latitudes may be exemplified by the Great Lakes Region of the United States, the European Plains, the Pampas, and the Chinese river valleys. Generally, in these latitudes the mountain areas are but slightly used. In the low latitudes, however, the mountain areas are preferred to the lowlands because of the more comfortable climates associated with the highlands.

Climate Maps. Climate maps are invaluable in geographic evaluation. There are numerous systems for designating climates, none of which will be specifically referred to here because they are often most complex. Of the many climate types those most attractive to man are those which have pronounced seasons, adequate summer precipitation, and a growing season of four or more months. These climate types are characteristic of the humid subtropical, humid continental, and marine regions. Areas with these climates are re-

spectively the Southeastern United States, the American Corn Belt, and the United Kingdom. Other areas having weather and climate phenomena paralleling any of these three will have soils and natural vegetation quite similar to them—and other things being equal, will resemble or have the potential for eventually paralleling these areas.

For example, the Hungarian Plain has a humid continental climate resembling the Central States of the United States. Such an area is attractive as a food producer for a "have not" nation, or bloc of nations. It, too, is a producer of grain and livestock. Also, it is treeless, has deep and fertile soils, and has grass as its natural vegetation. By noting climatic data for other areas, it is possible to deduce much about them thru comparing with areas you already know. Use caution, however, in such evaluations because there is always the human factor which must be considered, for in some instances man has quite changed environments from what you would expect them to be.

Vegetation Maps. Natural vegetation patterns also give some clue in areal evaluation. Generally speaking the areas of prairie grasses, deciduous (broadleaf) trees, and short grasses are the desirable lands.

Summary: When to Use Maps. You should use the maps showing climate, rainfall, population, relief, and natural vegetation both singly and in conjunction with the others for evaluating areas. For example, let us see how Illinois is depicted on each of these maps. The climate map shows it to be humid continental; the rainfall map shows heavy precipitation with more than one-half coming during the growing season; the population map shows a dense population; the relief map shows the state to be a plain; and the natural vegetation map indicates prairie grasses. In every respect the physical and cultural environments are satisfactory for intensive land utilization—and that is the case for Illinois. Illinois is definitely an integral part of the North American core. Try this technique with other areas of the world, and you will be able to readily observe the whole environmental continuum from deficiency to adequacy—thus giving you a tool for geographic and geopolitical evaluation which will obviate, in part, the necessity for voluminous reading to understand areas.

When discussing any part of the world, it is helpful to always have a large map before the class. This serves as a ready frame of

reference for instruction about small areas within the whole. Anything to encourage the students to think big and globally should be encouraged.

II. Teaching Methods

As for your teaching method, no single one is best for all instructors. Generally, the lecture-discussion supplemented by carefully structured student reports and map familiarization exercises is the most satisfactory. Don't hesitate to bring in faculty experts (who are not necessarily in the geography field) as guest lecturers. They can provide invaluable geographic, political, psychological, and sociological insights for your area analyses.

Lastly, experience has shown that geographic instruction is facilitated when students are required to actually memorize some population and area data, learn locations of geographic names, and learn some representative climatic data. Any student of world political geography can't possibly appreciate the significance of world events if he has no idea of such basic knowledge. He must be able to appreciate such elementary knowledge as the significance of the relatively small areas of European countries, high population densities in Western Europe and Southeast and Eastern Asia, and location of places in the news.

III. Subject Matter

Techniques for more understandable presentation of geographic and other facts and interpretations have been presented. In world political geography, geographic understandings and political phenomena must be integrated, and this constitutes the subject matter of such a course. That there is no one best way to adequately do this is aptly stated by Stephen Jones of Yale University writing in the *Geographical Review* in October 1955. He says, "There is no simple system of political geography, no single thought-filter thru which to strain all geographical information. We need a series of filters, a composite or an eclectic global view." This viewpoint should be taken as a warning not to attempt to explain political geography in terms of the thinking of Mahan, MacKinder, Spykman, de Seversky, or anyone else singly, and sometimes not in combination either, for they may cancel out as do de Seversky and Mahan. Each system so far developed has pitfalls, and some; namely, the organismic system, have even unfortunate connotations. Two types of organization of subject matter are presented here for possible use.

National Power Concept. One of the best systems to follow is utilization of the elements of a global view based upon a national power concept. The major elements employed in this system would be: 1) material base; 2) population; 3) culture, including government; 4) physical environment, including climate, landforms, and minerals; 5) atmosphere, seas, and continental land masses as means for projecting power.

This approach is in some instances subtle and in few instances easy to follow except by a trained political geographer. You may want to use it, tho.

Ecological-Political Power Concept. An easier approach for geopolitical evaluation of areas is herewith presented. It has been used successfully by political geographers in American universities. The system can be used most easily with individual countries because of the nature of geographical and political data. In your strategic area or regions analysis you will synthesize your findings and arrive at a meaningful composite for the area. The ecological system follows:

Physical Properties: 1) size; 2) shape; 3) location; 4) boundaries; 5) surface features; 6) climate; and 7) natural resources—minerals and fuels, forests, water power, fisheries, soils.

Patterns of Resource Use: 1) industries (their locations, type, and size)—manufacturing, agriculture, others; 2) surpluses and deficits—foods, minerals; 3) transportation; 4) trade in resources.

Social Characteristics: 1) population (magnitude, density, homogeneity, and trends); 2) cultural patterns (religion, customs, and education); 3) economic patterns and technological abilities.

Adjustments for Controlling the Area: 1) type of national government; 2) degree of and instruments for local autonomy.

External Adjustments: 1) foreign policy; 2) international arrangements.

Summary evaluation of this area as it relates to global views and strategy. In your summary, emphasize what the area evaluation means in terms of Air Age concepts.

Conclusion

It is obvious that there is a high degree of relationship between geography and national policy. Also, geography and international relations and tensions are closely tied together. A principal link between geography and the political sciences seems to be move-

ment. The spectacle of the "state travelling" to acquire additional resources, to become a "have" rather than a "have not" nation, and to provide itself with buffers and satellites is a phenomenon of political geography—and there are many others. By being provided with some useful aids in making more precise geographic evaluations of states and areas, better interpretations can be made. These interpretations in turn are examined for their effects upon high level policy decisions, for military and political significance. The area evaluation systems presented should further aid you in putting together a vast maze of information for better understanding and teaching what transpires in the world of today. Using the guidelines presented in either or all of the three areas listed in this paper should enhance a teacher's ability to make instructing world political geography more dynamic in nature.

GEORGE THOMAS RENNER, 1900-1955

George Thomas Renner, Associate Editor of the JOURNAL OF GEOGRAPHY and Professor of Geography at Teachers College, Columbia University, died suddenly on October 14, 1955 at the age of fifty-five.

Professor Renner received the Bachelor of Arts degree from Cornell College of Iowa in 1922, the Master of Arts degree (1924) and Doctor of Philosophy degree (1927) from Columbia University. In 1943 his undergraduate college recognized and honored his accomplishments by awarding him the Legum Doctor.

Numerous committees, commissions and organizations made use of his ability both as a worker and as an advisor. Educational, military, governmental and commercial enterprises benefited from their associations with him. His editorial capacities were directed not only to professional journals, but also to map editing and textbook publishing. A man of positive philosophy, Professor Renner invariably contributed a dynamic impact to those projects with which he was associated and his ceaseless activity carried him into many phases of the profession of geography.

As an educator Professor Renner performed professional services for several of the major educational institutions of higher learning. He held positions at Columbia University, University of Washington and Stanford University in addition to his tenure at Teachers College from 1939 until his death. For the past several years he had spent the summers as a visiting professor at additional institutions. In consequence, his professional contacts with educators and geographers were numerous and abiding. His student contacts numbered in the thousands and he took great delight and satisfaction in stimulating them to develop deeper concerns for the content and methodology of his subject.

As an avid and prolific writer of both books and articles on diverse geographic topics, Professor Renner wrote for both layman and student. He believed sincerely in the importance of popularization as a method for stimulating public interest and in consequence became a contributor to several of the finer popular magazines. On the academic side he was the author or co-author of numerous textbooks at the elementary, secondary and college levels. For professional magazines he supplied many articles on both methodology and content. In toto his writings will constitute a reservoir of material

for the students of the future and his impact on geographical thinking will continue to be significant.

For a few, who were his students and closely associated with him, there will remain the imprint of a personality not well known nor understood by many of his colleagues. For these few he was an inspirational geographer seeing for himself and laying before others a great vista which needed to be attacked. He provided his students with numerous professional opportunities and was unstinting in his assistance. His sensitivity to the needs of students was an outer expression of the great, personal, inner sensitivity he possessed. The pride which he took in the successes of his students, and the great efforts which he expended to fulfill the need for wider geographic appreciation and understanding in American education, should be justified in and by the generation which lies ahead and bring credit to the field in which he labored.

RICHARD L. TUTHILL

Duke University

REPORT OF THE FORTY-FIRST MEETING OF THE NATIONAL COUNCIL OF GEOGRAPHY TEACHERS

INA CULLOM ROBERTSON, *Secretary*

The Forty-first meeting of the National Council of Geography Teachers was held in the Claypool Hotel, Indianapolis, Indiana, November 25-26. More than three hundred members and guests were in attendance, coming from such distant points as California, Florida and the Province of Manitoba, Canada. One guest from Paris, France, added an international aspect to the meeting. Among those in attendance were teachers of geography at all grade levels, supervisors, administrators and representatives of government agencies.

The large registration, the excellent program of professional papers, the friendly atmosphere that prevailed everywhere, together with the warm hospitality of the Indiana Council of Geography Teachers, all contributed in making this a meeting that will long be remembered. Much credit for the success of the meeting must be attributed to the untiring work of the President, M. Melvina Svec, and John C. Finney, Chairman of the Local Committee.

The preliminary program for the meeting appeared in the September issue of the JOURNAL OF GEOGRAPHY.

The program of the first general session set the tone for the meeting with three papers on the theme: "Geography Opens the Way." A note of sadness was brought to this session, however, with the announcement of the sudden and untimely death of Dr. George T. Renner, Jr., whose paper was read by title.

Other sessions revolving around the themes: "Progress in Underdeveloped Countries; Dynamic Geography; Creating Environments for Geographic Learnings; and Some Essential Vitamins in Geography Education" produced papers of high quality in the field of geographic education.

At the luncheon, one hundred and forty-five persons were present. The State Coordinators served as hostesses and were responsible for the attractive table decorations. Dr. Neville V. Scarfe, Dean of the College of Education, University of Manitoba, gave the address at the luncheon.

At the banquet on Friday evening, 185 persons were present, with M. Melvina

Svec presiding. The unique table decoration consisting of lighted globes and map table mats added much to the festive occasion.

After the introduction of the guests and new officers, Zoe A. Thralls made the presentation of the Awards. The J. Paul Goode Prize was awarded to Earl B. Shaw, while the George J. Miller Prize was given to Neville V. Scarfe.

The distinguished Service Award Citation was read by Earl B. Shaw. The Award was presented to Joel Russell Whitaker, of the George Peabody College for Teachers, Nashville, Tennessee in recognition of his leadership and outstanding contributions to the field of geographic education over the years. The full text of the Citation appeared in the January issue of the JOURNAL OF GEOGRAPHY.

The National Council was honored by the presence of Dr. Neville Scarfe, a member of the National Council from Winnipeg, Canada. His address, "Geographic Education and Teaching Method" was scholarly and thought provoking.

THE GENERAL ASSEMBLY

At 10:50 on Saturday morning November 26, over one hundred members were present to conduct the business session of the National Council.

The Secretary gave the report on the membership and the various activities of that office. The membership during the past year has shown steady growth over previous years.

Sixty members are listed as Contributing Members. Almost half of the total membership is classified as *Fellows*. These have been members for five consecutive years or more.

The financial status of the National Council was given by the Treasurer, John H. Garland. The report as read was the statement of Mr. Arthur Wanaker, CPA, who found all records in order.

The report of the Planning Committee, by Chairman, Adelbert K. Botts, State Teachers College, Trenton, New Jersey, was presented in brief by M. Melvina Svec in the enforced absence of the Chairman.

It is the duty of the Planning Committee to lay out areas of study, plan projects and activities for the advancement of geographic education to be carried on by the National Council. Briefly, the projects which were passed upon by the Executive Board and accepted by the General Assembly include the following:

1. That the Committee on Tests continue the work started.
2. That a series of publication on the teaching of geographic skills and understandings be instigated by the National Council.
3. That an editor be selected by the Executive Board to organize the series and to obtain acceptable authors.
4. That the National Council publish a leaflet on "Careers in Geography" to be used by Guidance Counsellors at the Junior, Senior High School Level.
5. That the National Council appoint a desirable person to act as historian or archivist for the organization.
6. That the matter of financing of a permanent Executive Secretary for the National Council be investigated.
7. That an Ad Hoc committee study affiliation of the National Council with the NEA.
8. That an index be prepared for the JOURNAL OF GEOGRAPHY dating from the last index (1923) through the year 1955.

THE COMMITTEE ON RESOLUTIONS

The text of the report of the Committee on Resolutions is here given in full.

PART I

Whereas, there is a void in the teaching of geography in many of our high schools, while other great nations teach geography in every grade level, and

Whereas, our foreign policy is based to a great extent on geographic situations, and

Whereas, young men and women who serve in our armed forces should have a better understanding of our country and its capabilities, as well as knowledge of the ways of living in and understanding of those countries to which they are assigned overseas, and

Whereas, geography dispells the insular patterns of thought which left Americans as people largely unconcerned with the rest of the world until we were thrust into a position of world leadership during World War II,

Be it resolved: That this convention of the National Council of Geography Teachers urge teachers of geography everywhere to continue to work for the recognition of the importance of geography in their own schools and school systems and its inclusion in any program of general education, and

Be it further resolved: That this convention of the National Council of Geography Teachers bring to the attention of the states and territories of the United States thru the State Coordinators the importance of geography in the curriculum of elementary and secondary schools and the desirability for more and better teaching of geography.

PART II

Be it resolved: That the National Council of Geography Teachers express sincere appreciation:

To the management and staff of Hotel Claypool for their hospitality and cooperation;

To the Indianapolis Convention Bureau for supplying personnel and materials for registration;

To the Committee on Local Arrangements, Hospitality Committee, Hosts and Hostesses, exhibitors, and to all participants in the program for their splendid efforts and contributions to the success of the meeting;

To Melvina Svec, President, the other officers, Executive Board, and committee members for their services to the National Council of Geography Teachers and thus to geography;

To Ina C. Robertson for four years of faithful service as Secretary;

To Mamie L. Anderzohn for four years of valiant labor as Director of State Coordinators;

To George J. Miller for resuming editorship of the JOURNAL OF GEOGRAPHY during the absence from the United States of Dr. Barton.

Be it further resolved: That the National Council of Geography Teachers records its deep sense of personal loss in the passing of the following members:

Charles C. Adams. Retired Director of the New York State Museum, Albany. An internationally known zoologist, ecologist, author, and educator, he brought to geography the concepts and viewpoint of ecology.

Hettie Blythe. Retired Chairman, Department of Geography, State Teachers College High School, Valley City, North Dakota. Actively interested in young people and their education, she served among her varied activities as treasurer of the loan fund of Gamma Theta Upsilon.

R D Calkins. Professor Emeritus of Geography, Central Michigan College of Education. Second Vice-President of the National Council in 1921 and President in 1922. Organizer and for forty years chairman of the Department of Geography at Central Michigan, he was widely known as a thoro and inspiring teacher.

Lawrence C. Davis. Chairman, Department of Geography, State Teachers College, Indiana, Pennsylvania. A specialist in the geography of northeastern United States,

he made a major contribution in local field work and city planning within Pennsylvania.

Clarence L. Dow. Chairman, Department of Geography, Ohio University. His death occurred while returning from Japan where he had been a Fulbright lecturer in geography. Active in the field of conservation, he helped draft the legislation which created the Ohio Natural Resources Commission.

Harriet A. Elliott. Retired Chairman, Department of Geography, West Chester State Teachers College, Pennsylvania. One of the most active geographers in the state, she contributed to geographic education thru her teaching, her services to the Pennsylvania Council of Geography Teachers, and as an author.

Bradford K. McGaw. Chairman, Department of Geography and Geology, University of Chattanooga. A more recent convert to geography, his untimely death at the age of forty-three cut short his contributions to the teaching profession and to the field of geographic research.

Roderick Peattie. Professor of Geography, Ohio State University. As an author and editor he contributed not only to the literature of geography, but he also put geography into literature.

Coy T. Phillips. Associate Professor of Geography, Woman's College of the University of North Carolina. One of the coming men in the field of geography, his accidental death while swimming cut short his contributions to geographic education as well as to research on the geography of the South.

Sidman P. Poole. Chairman, Department of Geography, University of Virginia, and State Coordinator of the National Council. Chief of the topographic bureau of the War Department from 1940 to 1946, consulting editor of geography texts and readers, and active member of the various geographic organizations, and educator, he was an enthusiastic geographer who imparted his enthusiasm to others.

George T. Renner, Jr. Professor of Geography, Teachers College, Columbia University. Second Vice-President of the National Council in 1942, 1943, 1944. Associate Editor of the JOURNAL OF GEOGRAPHY. Consultant to various agencies of the United States Government, editor, author, lecturer, and educator, he blazed paths that caused others to stop, listen, and think.

The National Council of Geography Teachers and geography as a whole has suffered a great loss in the passing of these friends and fellow contributors to geography and geographic education. We value their memory. We are better geographers and teachers because of them. May their work remain alive thru us.

We have been saddened also during recent months and even recent days by the loss of geographers who were not members of the National Council.

Be it also resolved: That the National Council of Geography Teachers records its sorrow in the passing of Roy W. Hatch. Retired Chairman, Department of Social Studies, Montclair State Teachers College, New Jersey. Altho not himself a geographer, he was well known to National Council members as co-author of the Stull-Hatch series of geography texts.

In submitting this report, the Resolutions Committee recommends its adoption. It further recommends that these resolutions be recorded upon the Minutes of this meeting and that the Secretary send letters of appreciation to individuals and organizations, and letters of sympathy to the respective families.

Respectfully submitted,

GEORGE S. CORFIELD
J. WESLEY COULTER
LYLE R. FLETCHER
VILLA B. SMITH
ELIZABETH EISELEN, *Chairman*

The last item on the agenda of the General Assembly was the report of the Committee on Nominations. The officers of the new administration includes:

President: Norman Carls, University of Pittsburgh, Pittsburgh, Pennsylvania
First Vice-President: Ina Cullom Robertson, State Teachers College, Valley City, North Dakota
Second Vice-President: Mary Viola Phillips, New Kensington High School, New Kensington, Pennsylvania
Secretary: John W. Morris, University of Oklahoma, Norman, Oklahoma
Treasurer: John H. Garland, University of Illinois, Urbana, Illinois
Members of the Executive Board: Florence Cullin, Adah Flemington, Clarence W. Sorenson, M. Melvina Svec

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GEOGRAPHICAL PUBLICATIONS

Cecil B. Ellis. **Fresh Water From The Ocean.** Ronald Press Company, New York, 1954. xi and 217 pages with charts, diagrams, and index. $5.00.

The student of conservation will find this study valuable when considering the many aspects of the problem of water conservation. Mr. Ellis, Head of the Research Department of Walter Kidde Nuclear Laboratories, Inc., has written this highly readable work under the sponsorship of the Conservation Foundation.

The aim of this study was to determine whether fresh water could be extracted from the ocean on a large scale—one thousand million gallons a day—at a price which could be met by cities, industries, and irrigation projects. The various types of separation methods are presented and an analysis is made of the cost factors of labor, power, plant construction and maintenance for each separation type.

One of the most interesting conclusions of the study is that within approximately ten years it should be possible to extract fresh water from the ocean on a large scale at a total cost of about thirty cents a thousand gallons at a cheap-power location. This does not include the cost of pumping the water inland from the coastal area, thus indicating that only coastal areas with adequate energy resources can be expected to become markets for purified sea water.

The increasing problem of water supply seems to engender hope on the part of many that the extensive oceans will furnish the solution to our problems. For the student of conservation this work by Ellis furnishes a perspective which is needed before any conclusions can be drawn concerning the use of the oceans for our water supply of the future.

Lorrin Kennamer, Jr.

East Texas State Teachers College

André Migot. **Tibetan Marches,** translated from the French by Peter Fleming. E. P. Dutton and Co., Inc., New York, 1955. 255 pages with illustrations. $5.00.

This engrossing account of a French doctor's 1946-'47 religious pilgrimage across eastern Tibet, starts at Kunming, Yunnan, and takes the reader across western Szechuan, thru eastern Sikang and Chinghai (Kokonor) provinces (Chinese-controlled Tibet), and thence down the Huang-ho valley thru Lanchow and Ninghsia to Paotou, and overland from there to Peiping. The "Old China Hand" will experience nostalgia in reading about rickety motor trucks, saddle-galled mules, and grunting yaks used for transport. Dr. Migot, a convert to Buddhism, and able to read and speak one Tibetan dialect, is better qualified than most travelers to discuss human geography of little-known Sikang and Chinghai.

His arduous and sometimes dangerous journey was relieved by periods of rest and instruction in lamaseries, at one of which he was initiated into the Karmapa sect of Buddhism. Primarily a travelogue, the book holds the reader from start to finish; but this reviewer detects a lack of unity between the chapters, at the beginning and end, that cover travel in "China Proper," and those of the heart of the book that treat of the author's sojourn in Sikang and Chinghai, where culture is essentially Tibetan, and Chinese control is nominal. The episode of the author's capture by Communist soldiers at the Ming tombs, near Peiping, seems out of place in this book coming, as it did, months after the author's mission had been completed. Geographers will welcome the two relief maps, and good photographs of landscapes and human activities, and will appreciate the author's exposition of the adaption of the Tibetan people to their difficult environment. Readers will enjoy Peter Fleming's excellent style as translator. The book is written in 10 parts of 43 chapters and 255 pages.

JAMES THORP

Earlham College

Michael W. Straus. **Why Not Survive?** Simon and Schuster, Inc., New York 1955. xi and 272 pages. $4.00.

This book is the latest in a long series of volumes concerned with mistreatment and need for wise use of natural resources, some of which contend that we cannot survive *unless* and others, that we can survive *if*. Michael Straus has tried hard to disassociate himself from less optimistic writers of such books, whom he characterizes as "advocates of the shock-em-stiff schools of conservation." Despite his more optimistic approach the same "ifs" are present.

The 155 pages devoted to the United States are a mine of information on natural resources and their treatment, and especially, on the problems facing government agencies responsible for them. The author knows from long personal experience how economic greed, operating politically, can and does threaten sound conservation programs and even the positions of good public servants.

Short-term survival (25 to 50 years) for the United States is overemphasized. The author assumes our right to meet resource deficiencies from supplies elsewhere in the world, a thesis some students of world affairs will challenge in the light of recent history. The briefer treatment accorded the world outside the United States is focussed primarily on the usability of continents and countries by an "ever-increasing" humanity.

This stimulating and sincere book is useful for geography teachers who, even if less optimistic than Straus, are likely to be sympathetic with his reasonable point of view: Why not use our common sense, our great technology, and our democratic government for purposes of peace—why not be wise enough to survive?

HENRY F. BECKER

Florida State University

George H. T. Kimble and Dorothy Good, ed. **Geography of the Northlands.** John Wiley and Sons, Inc., New York, 1955. x and 534 pages with illustrations, maps, appendix and index. $10.50.

Among the regional geography texts there has been a notable gap in that there has been no systematic or regional geography of the world's northern regions. An earlier text "Geography of the Polar Regions" by Mecking, published in 1928, has been out-of-date for many years, and particularly so in the past decade with the rapid accumulation of facts which has come with man's penetration of the Northlands during World War II and the following "cold" war. With the strategic value of the Northlands recognized, it is appropriate that teachers should now have a text which will help them to understand

and explain distribution patterns and regional characteristics. Most of the usual continental texts have given scant attention to Northern areas, perhaps because of a lack of information or interest of the authors, and this text now fills that gap.

The book was the idea of Dr. George Kimble when he was head of the Geography Department at McGill University, Montreal, and many of the chapters have been written by staff members of McGill, or by others who have been associated with the McGill Summer School of Geography at Stanstead, Quebec. The actual editing of the book was done by Dorothy Good when she was with the American Geographical Society.

The book has the advantages and disadvantages of any symposium text where fourteen authors write sections. Some of the systematic specialists write excellent chapters, but which may be difficult for a General Arts student to follow if he lacks a good science background. Some of the regional chapters suffer from the delay of three to five years between the time of writing and that of publishing. On the other hand the chapters on the Northern Soviet Union are a useful contribution to our geographical literature, as are those on Eastern Canada and the Canadian Arctic Islands.

The book is welcomed by geographers interested in the North as a possible text for a course on that area, and will be of great value to teachers of regional geography courses to supplement other texts on North America and Eurasia.

J. LEWIS ROBINSON

University of British Columbia

Alice E. Goudey. **Here Come The Deer!** Charles Scribner's Sons, New York, 1955. 94 pages with illustrations. $2.25.

Gertrude Wallace Wall. **Gifts From the Grove.** Charles Scribner's Sons, New York, 1955. 96 pages with maps and illustrations. $2.50.

Eileen Chang. **The Rice-Sprout Song.** Charles Scribner's Sons, New York, 1955. 182 pages. $3.00.

Sister Maria del Rey. **In and Out the Andes.** Charles Scribner's Sons, New York, 1955. vi and 281 pages with maps and illustrations. $3.95.

Here Come The Deer. This attractive book, illustrated with many two-color sketches by Garry MacKenzie, tells the story of the Whitetail Deer, the Elk and the Barren Ground Caribou. It is excellent Natural History and should delight primary and early elementary school children.

Gifts From the Grove. Thru excellent pictures the story of the production, packing and marketing of oranges, grapefruit and lemons is told. Likewise, the story of the newer citrus by-products. The book is profusely illustrated with photographs by John Calvin Towsley and others. Valuable supplementary material for upper elementary or Junior High School.

The Rice-Sprout Song. This is a fascinating account of present-day China, written by a Chinese author familiar with life under the communist regime. The story deals with a peasant family, its desperate struggle for bare subsistence and its attempts to accept and adjust to life dominated by a new political and economic ideology.

In and Out the Andes. With Maryknoll Sisters as guides, the reader is taken over mission trails in Bolivia, Chile, Peru, Panama, Curacao, Nicaragua and Yucatan. While chief emphasis is on the work of the missioners, their schools and churches, their countless services to native peoples, there are vivid descriptions of places and the forces of nature to which all must make adjustments.

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The National Council at Work

Conference participation. During the month of January more than twenty members of the NCGT represented our organization at regional conferences sponsored by the National Commission on Teacher Education and Professional Standards, a commission of the NEA. Delegates of the NCGT who participated in the regional conferences included:

At BOSTON: Alice W. Magee, Paul Porochniak and Henry J. Warman.

At WASHINGTON, D.C.: Berenice Casper, Anna Krehbiel, Helen Mixter and Zoe A. Thralls.

At ATLANTA: Eugene Mather and Julian Yoder.

At CHICAGO: James R. Beck, Mary Jo Read, Bernard H. Schockel and Clarence W. Sorenson.

At KANSAS CITY: Florence Cullin, Sidney E. Ekblaw, John W. Morris and Grace Starlin.

At SALT LAKE CITY: Elliott Budge, Nicholas Helburn and Eugenia Tuttle.

At SAN FRANCISCO: Alfred R. Buts, Chester F. Cole and John W. Reith.

The conference theme was "Next Steps in the Improvement of Teaching Services."

Delegates considered the major task of expanding and improving teacher education to meet the extraordinary demands of the decade ahead.

Our New Director of State Coordinators. Dr. Herbert H. Gross has accepted a three year appointment as Director of State Coordinators. Dr. Gross is Professor of Geography at Concordia Teachers College, River Forest, Illinois. For the past three years he has served the NCGT as Chairman of the Committee on Research in Geographic Education. As Director of Coordinators, Dr. Gross becomes an officer and member of the Executive Board. We are indeed fortunate to have his interest and willingness to participate so actively in helping to shape the policies and direct the activities of the NCGT.

Your suggestions welcomed. Our 1956 annual meeting will be at Atlantic City, New Jersey on November 23-24. The program for this meeting is now in formative stage. Your suggestions are invited.

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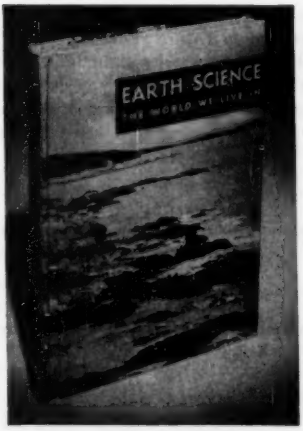

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EDITORIAL NOTES AND NEWS

Do you believe in the story method of teaching geography to children? Professor Whitbeck did. Ray Hughes Whitbeck will long be remembered as a great teacher and educational geographer. While Professor of Geography and editor of the JOURNAL OF GEOGRAPHY, he wrote an article entitled "Ideals and Aims in Elementary Geography," Volume XIV (1916), pages 65-70, which contains the following paragraph on the story method:

"By reason of the mere fact that they are young children and not grown-ups, they have certain interests and these are the teacher's avenues of approach. One of children's earliest interests is in stories. The normal child loves stories, particularly stories about children and animals and strange places where people do wonderful things, like driving a team of dogs, or riding camels. Now it would not be a wise use of time to hunt up these stories and spend school time in telling them solely to stir up a desire for geographical information. The stories should be worth telling for reasons quite apart from ulterior motives connected with geography. Good stories are a part of education, and they are more likely to be interested when they deal with people and places and happenings which belong to a world beyond the child's daily life. Stories of the Eskimo, of the Indian, of children in China or Japan or Holland are the child's delight. Such stories gratify a perfectly natural interest, and their value is everywhere recognized quite apart from geography. But by selecting some stories which awaken a childish interest in the children and people of other lands, the way is made easy for the beginning of geography. Geographical information will now begin to have use in the child's world, for it gives light on things which interest him. He does not bother to reason out why he is glad to know where Russia or Scotland is; he is simply interested in that story of Boris or Donald, and he finds it satisfying to know something about the countries where they live. This, it seems to me, is the natural way for geography to begin."

Have you used the story method this year? How many supplementary readers do your pupils have access to in your room that use the story method?

Do you believe that children ages 6-9 are interested in nature study or science? Does your school curriculum for grades 1-3 contain both science and social studies? Do you separate the presentation of these two subject matter fields or do you correlate them in their presentation. If you correlate the teaching of these two big fields and teach the local physical and human (cultural) environments, then you are teaching geography whether you know it or not.

Do you have a sandtable in your classroom? Have you taught some physical geographic concepts with it this year?

Have your pupils made a scroll geographic materials strip this year? If not, why not?

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The 52nd annual meeting of the Association of American Geographers is to be held at the Sheraton-Mt. Royal Hotel in Montreal, P.Q., Canada, from the 1st to the 5th of April, 1956. Geographers are advised that space is available free-of-charge for the exhibition of research maps, made since 1950, and considered to be of interest to the members of the AAG from the point of view of method or content. Field trips are planned for Sunday, April 1st (St. Lawrence Seaway), Tuesday afternoon, April 3rd (City of Montreal), and Thursday, April 5th (Laurentian Mountains). Reservations are necessary for the field trips. Address correspondence to Secretary, Local Arrangements Committee, Department of Geography, McGill University, Montreal, P.Q., Canada.

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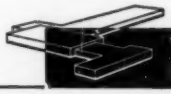

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